RESEARCH PLAN PROPOSAL

DETERMINANTS AFFECTING MOTIVATION LEVEL OF GOVERNMENT MEDICAL PRACTITIONERS: A STUDY OF RURAL RAJASTHAN

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Introduction

The primary aim of hospitals is providing the highest quality of patient care. Often overlooked, yet nevertheless true, efficient patient care develops not from the quality of medical knowledge alone nor from modern medical equipments nor drugs alone, but from a combination of all these, and more importantly a well motivated workforce. Most administrators do not fully accept or understand the notion that "the real difference is people". Hospitals as health care organizations are involved in providing preventive, curative and rehabilitative services. They are an integral part of the medical and social structure. The hospital utilizes widely divergent groups of professionals, semi-professionals and nonprofessionals. It represents high interdependence among services. The success of hospitals in the public health system success is largely dependent on the quality of work of the employees.

Health workers form the foundation of health service delivery: their numbers, skill and commitment are critical for the delivery of good quality health care. Geographical imbalances in the health work-force, a problem common to most health systems, raise concerns about equity (i.e. differential access to health care) and efficiency (i.e. the allocation of resources to those areas where they have the greatest impact on health outcomes). Fortunately, renewed attention is being given to this problem, which is particularly relevant for developing countries, where resources are limited and health outcomes are often poor. Ultimately, success or failure in attracting health staff to rural facilities or retaining them in rural posts depends on health workers' preferences and choices.

While many aspects of health system development in the international context have been researched, there has been a surprising lack of attention on the human resource element. A core component of the information necessary for policy making is still missing because there remains a dearth of studies about what motivates health workers. As a consequence, many public health systems have implemented measures designed to improve health worker motivation without an empirical base to guide their choice of interventions.

The worldwide experience with efforts to improve health system effectiveness has shown that the positive impact anticipated from reform efforts have often been thwarted by the "unexpected" behavior patterns of health workers. Effective and efficient health care systems depend critically upon actions taken by individuals working in the system. Factors such as availability of resources and the technical competence of the worker are not sufficient in themselves to always produce desired work behavior. The daily unresolved frustrations of workers in the health service reduce their willingness to exert and maintain efforts towards attaining the overall goal of providing high quality care. Moreover, this pent up frustration is sometimes turned outwards onto clients in unfriendly behavior and resentment. Health care delivery is highly labor intensive and service quality, efficiency and equity is directly linked to worker motivation.

The Health profile of Rajasthan State is in a very dismal condition. The Major indicator like Infant Mortality Rate (IMR) (SRS 2008) and the Maternal Mortality Rate (MMR) (SRS 2004 - 2006) is 63 and 388 respectively. There is a critical shortage of human resources especially at FRUs/CHCs. The shortage of critical health staff is faced more at the peripheral level, seriously affecting the quality of care, especially at the first referral level. The introduction of the cadre of Rural Medical Officer has greatly increased availability of MOs at PHC level. There also exists a shortage of Lady MOs which are a necessity in the Indian context. The government has also introduced Multi-skill trainings so as to better equip the health centres. However, the utilization and operationalisation of trained staff is inadequate.

In regard with Service Delivery most CHCs and PHCs have registered increase in institutional deliveries. While maternal health has received attention, child health needs more focused attention, especially neo natal mortality. The government has therefore changed its stance from Janani Suraksha Yojna to Janani Shishu Suraksha Karyakram, wherein child care has been once again put into focus. Integrated HMIS is in pilot phase covering Reproductive and Child Health (RCH), Integrated Disease Surveillance Project (IDSP) and National Disease Control Programmes (NDCPs), which would help in Data validation.

Review of Literature

Motivation creates the energy which incites, inspires, impels, influences, urges and moves one to action (Hellriegel and Slocum, 1992; Guralnik, 1984). According to Henderson (1987), motivation is a psychological process that stimulated and sustains behavior. In the 1960s, Professor David Mc Clelland of Harvard University accomplished the pioneering work of identifying motivation for achievement as a necessary and teachable precursor for the development of entrepreneurial behaviors. These studies were done cross- nationally, including India, Colombia and the United States (McClelland and Miron, 1979; McClelland and Winter, 1969; Stahl, 1986. Psychologists agree that motivation is "a decision-making process through which an individual chooses desired outcomes and sets in motion behavior appropriate to acquiring them" (Huczynsk, 1996: 100).

Why do we need motivated employees? The key answer is survival (Smith, 1994, cited in Chan, 2004). It is a fact that low employee motivation is one of the commonly occurring blockages and problems in managing people at work as well as getting high productivity in many organizations (Robbins, 1998; Francis and Woodcock, 1975). Besides, in our changing workplace and competitive market environments, motivated service employees and their contributions are the vital currency for an organization's survival and success (Chan, 2004; Low Kim Cheng, 2000).

The factors affecting worker satisfaction and motivation have an extensive literature and many theories, some of which has been reviewed by Dolea and Adams (Dolea C, Adams O:

Motivation of health care workers-review of theories and empirical evidence, 2005). In his seminal work on the Principles of Scientific Management, Frederick Taylor advocated providing financial incentives to workers and breaking down work to the one best way to perform tasks to increase their productivity (Taylor FW: The Principles of Scientific Management, 1911) an approach that frequently led to worker resentment and strikes (Montgomery D: The Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865-1925). Content theories were later developed to link worker motivation to the satisfaction of needs.

Motivating factors related to job content or other factors related to the job context are seen as contributing to job satisfaction. Process theories emphasized subjective expectations or the values of workers as influencing their motivation and work effort. Kanfer builds on these theories to stress the importance of employees' willingness and ability to carry out the goals of the organization in which they work (Kanfer R: Measuring health worker motivation in developing countries, 1999). Job characteristics have been identified as critical determinants of health worker motivation and satisfaction, and have also been described as a core domain in the measurement of health worker motivation, along with organizational commitment and conscientiousness (Gilson L, English M: Developing a tool to measure health worker motivation in district hospitals in Kenya, 2009).

Motivation seeks to explain and predict what energises, directs and sustains human behaviour (Huitt, 2003). The concept pertains to the sum of the forces within an individual that accounts for the level, direction and persistence of effort expended at work (Johns, 1996). It has been called the vital link between knowing and doing, thinking and action, and competence and performance (Revelle and Anderson, 1995). Human performance on a job has been linked to ability and motivation; but improvement in ability is a slow process, whereas motivation can be improved quickly and by implication, so can work performance (Accel-Team.com, 2003a). The forces that motivate, that is, that make humans seek to accomplish goals have been called motives, motivators, drives, desires, needs, wishes, stimulus, and so on, with slight differences in meanings.

Since 1978, the World Health Organization (WHO) had set the year 2000 as its target for the attainment, by all citizens of the world, of a level of health that will allow individuals lead a socially and economically productive life. Toward this goal the WHO recommended the implementation of a Primary Health Care (PHC) system, especially in developing nations. Certain indicators are used in assessing the success of a PHC program namely the number of hospitals, number of beds, doctors, nurses, dentists, pharmacists, technologists per given number of citizens. With respect to doctors, the WHO recommended a ratio of one physician to 10,000 people in developing nations (World Health Organization, 1978).

With regard to quality in service delivery, the motivational status of employees is more crucial than sheer statistics. Quality has been defined as the total set of features of a product or service that bear on its ability to satisfy stated needs (Van Fleet, 1991). Due to its importance, both for

organizations and their customers, quality issues have evolved into a management philosophy – Total Quality Management (TQM), a systematic attempt to achieve continuous improvement in the quality of an organization's products and/or service (Johns, 1996). The philosophy entails a high level of employee involvement, commitment, and teamwork. Quality implies trust,where trust is defined behaviorally as the relative frequency with which the words (promises) of an individual holds true (Patton, 1999). Quality and trust demand that employees desire to do things right the first time. In health care, the two should translate into efficacy of diagnosis and treatment, except for unalterable natural sequence of events. Quality in health care services requires that patients be regarded as deserving utmost consideration and the best care within available resources.

Empirical studies in the UK report that general practitioners had reasons to call upon various quality standards, one of which is the Investors in People standard, to meet the demands of a primary care-led National Health Service – NHS (Appleby and Jackson, 2000). According to the authors the Investors in People standard revolves around people issues – team working, customer interface, quality services and target setting. Targets pertain to reduction in death rates from some specified ailments by at least 40 percent by 2000, new maximum waiting times for General Practitioners visits, and year-on-year improvement in patient satisfaction. The Investors In People standard is underpinned by principles of Total Quality Management, which in itself is anchored on employee motivation. A latter UK study revealed that the NHS had to tackle challenges of recruiting and retaining key staff, that is, problems of low morale and motivation, especially among nurses and doctors (Finlayson, 2002).

Motivation & Relevance

The world wide experience with efforts to improve health system effectiveness has shown that positive impact anticipated from reform efforts (i.e. improving the availability and allocation of resources, promoting more efficient management, and rationalizing the role of government) have often been thwarted by the "unexpected" behavior patterns of health workers. Efficient and effective health care systems depend critically upon actions taken by individuals working in the system.

Factors such as the availability of resources and technical competence of the worker are not sufficient in themselves to always produce desired work behavior. The daily unresolved frustrations of workers in the health service reduce their willingness to exert and maintain efforts towards attaining the stated organizational goal of providing high quality care. Moreover, their pent up frustrations are sometimes turned outwards onto clients in unfriendly behavior and resentment. Thus, worker motivation is of critical importance in the health sector. Health care delivery is highly labor- intensive and service quality, efficiency and equity is directly affected by worker motivation.

Motivation in the work context can be defined as an individual's degree of willingness to exert and maintain an effort towards organizational goals. Motivation is an internal psychological process. Motivation in itself is not an observable phenomenon; it is only possible to observe either the results of the motivation process (such as improved performance) or perhaps, some of the determinants of motivation. The results of the internal process of motivation reflect the specific individual's situation and environment. Thus it is often said that motivation is a transactional process: it depends upon the fit between the individual and the organizational context within which they work, and the broader societal context.

While many aspects of health system development in the international context have been researched, there has been a surprising lack of attention to the human resource elements. A core component of the information necessary for policy making is still missing because there remains a dearth of studies about what motivates health workers. In the face of this lack of information about the determinants of health worker work motivation, governments have often relied excessively on financial incentives to encourage more productive behavior.

There are examples of the use of financial incentives as an explicit policy tool in Indonesia (Chernichovsky and Bayulken, 1995) and Thailand (Pannurunothai, et al., 1997). There is substantial discussion of the prospects for and effectiveness of performance related pay in developing country public sector contexts (Nunberg, 1995). Even if financial incentives are not explicitly used to promote higher productivity, the underlying philosophy of health sector reform programs often suggests money as a key motivator in the work context.

While accepting the notion that financial incentives may be important determinants of employee's retention, it seems equally evident that they alone are not able to resolve all work motivation problems. Moreover, an excessive focus upon financial incentives to motivate individuals in the public sector may have a large number of negative consequences. For example, workers may come to see financial rewards as more important than other type of rewards such as praise from supervisors or appreciation from the community, or they may feel conflict between their own notion of public sector values and messages about working for financial gain. (Giacomini, et7 al., 1996).

Given the lack of understanding about issues regarding health worker motivation, the study would be the first step towards the ultimate aim of improving worker motivation and hence improving health system performance. A persistent theme throughout the study is the need to broaden understanding of motivational determinants beyond simply financial incentives to other, often less tangible, non- financial instruments(such as recognition, feedback from community, etc.). The study is one step towards the ultimate aim of improving worker motivation and thereby improving health system performance in the state of Rajasthan.

Objectives

The specific objectives which can be drawn in accordance with the hypotheses are:

- To determine the gap between the staffing patterns in accordance with the Indian Public Health Standards
- To study the present HR policies of government medical practitioners and critically analyze them
- To determine the extent to which HR policies affect the level of motivation of government medical practitioners
- To identify the various factors affecting motivation of government medical practitioners
- To compare the levels of motivation of government medical practitioners at Community & Primary Health centres
- To suggest methods for enhancing the motivation of government medical practitioners

Hypothesis

The hypotheses on which the study rests are mentioned as below:

- First hypothesis
    - H_1 – There exists a gap between the staffing pattern and the Indian Public Health Standards
    - H_0 – There exists no gap between the staffing pattern and the Indian Public Health Standards

- Second Hypothesis
    - H_1 – HR policies affect the motivation of government medical practitioners
    - H_0 – HR policies do not affect the level of motivation of government medical practitioners

- Third Hypothesis
    - H_1 – There exists a gap between the motivational levels of government medical practitioners at CHCs and PHCs
    - H_0 – There exists no gap between the motivational levels of government medical practitioners at CHCs and PHCs

Plan of Work & Methodology

The study will be exploratory in nature. The study will review the existing HR policies (if any), and health action plans used for developing health infrastructure in contrast with the Indian Public Health Standards, it will also study the distribution and availability of human resources for providing services. The survey method would be used for collecting data for the study.

Sampling Design

1. Population - The population for the study include all doctors posted in rural CHCs and PHCs in Rajasthan.

2. The Sampling Frame - All seven administrative divisions of Rajasthan will be covered:

- *Ajmer division*: **Ajmer**, Bhilwara, Nagaur, **Tonk.**
- *Bharatpur division*: **Bharatpur,** Dholpur, Karuali, **Swai Madhopur**
- *Bikaner division*: **Bikaner**, Churu, Hanumangarh, **Sri Ganganagar**.
- *Jaipur division*: **Jaipur**, Alwar, **Jhunjhunu**, Sikar, Dausa.
- *Jodhpur division*: Barmer, **Jaisalmer**, Jalore, **Jodhpur**, Pali, Sirohi.
- *Kota division*: Baran, Bundi, **Jhalawar**, **Kota**.
- *Udaipur division*: **Banswara**, Chittorgarh, Dungarpur, **Udaipur**, Rajsamand, Pratapgarh.

3. Sampling Element- Individual doctors would be used as the sampling elements for the study.

4. Sampling Technique –Non probability purposive sampling would be used for identifying the respondents of the study.

5. Sample Size - The total number of sanctioned positions as collected from the directorate of Medicine and Health is 4909 of which 3400 are in position the rest of the posts are lying vacant. Therefore the overall sample size for a population of 3400 with 95% confidence level and a confidence interval of 6 would be 247 doctors. The sample is divided into demographic groups as discussed below.

6. Sample Sites and criteria of selection - To begin with, the information related to human resource for health will be collected from the directorate of medical and health services. To conduct in-depth study, from each of the administrative divisions, two districts will be selected based on its proximity to headquarter. One of the districts will be the headquarter district, and the other will be farthest from headquarter. The districts will be selected in consensus with the CMHO. The methodology is being adopted as the areas farthest from headquarter are less developed and hence the level of motivation of the two might vary.

Of the districts selected, data on each of the health facilities for each category of human resource for health will be collected from the district headquarter. Visits would also be made to the district hospitals. In addition, field visits will be made to a few of the health facilities at each level in two

of the blocks which will be selected per district. These two blocks will be the ones where the maximum and minimum allocation of human resources has been made. Human resource will be the doctors allocated per block against the sanctioned positions. Once the blocks will be decided, two Community Health Centres/First Referral Units, four Primary Health Centres will be visited in each block to understand the reasons of under and over coverage and the difference in the motivation level of these doctors. The table below shows the number of health facilities which will be visited per category.

Region	Districts	First Referral Unit/ Community Health Centre	Primary Health Centre
Ajmer	2	4	8
Bharatpur	2	4	8
Bikaner	2	4	8
Jaipur	2	4	8
Jodhpur	2	4	8
Kota	2	4	8
Udaipur	2	4	8
Total	14	28	56

Data Collection methods and tools:

Both quantitative and qualitative methods will be used to collect the required information. In consultation with the state officials, reference period will be decided for which the information will be gathered. While quantitative information will be collected for all 33 districts, qualitative information will be collected from the sites and health facilities which will be visited. Data collected will include:

- Review of policies, records and reports on Human resource for Health
- Collection of the data with respect to current deployment of the HRH
- Interview with State, District, Block and Village health facility heads/ Medical practitioners (MOs, SMOs, RMOs, SS, JS).
- Data with regard to level of motivation will be collected with the help of schedule

All the collected information will be reviewed with respect to the policies and norms and situational analysis will be done on the availability and utilization of services. Discussion with state, district and block health officials will be conducted to build understanding on the existing scenario and suggestions will be sought to ensure rational deployment and improve the availability of services.

Tools Used for Data Collection

Self-designed schedule based on an extensive survey of literature would be prepared. The schedule would be semi structured. The responses for close ended questions related to motivation would be obtained from the patients on a Likert-type scale of 1 to 5 for some variables.

Tools Used for Data Analysis

- **Descriptive statistics** will be used for understanding the data
- **Reliability** - First of all internal consistency of the measures will be established through item to total correlation. To check the internal consistency of the measures, the Pearson correlation will be calculated between the item scores and total scores of the measures of service quality and patient satisfaction separately.
  Cronbach's Alpha reliability of measures will then be calculated using SPSS software. Reliability will be computed to check whether data items measured the variables they were supposed to measure and that the measures were stable when used for repeat measurements.
- **Validity -** The Face validity Method will be used to assess the validity of the questionnaire.
- **Factor Analysis -** Principal component analysis will be applied in order to identify the underlying factors of motivation.

Limitations & alternative plan of the study

The study is designed as an exploratory examination of health worker motivation for the state of Rajasthan. As such, it provides a snapshot of health worker perspectives at one point in time, and the relationships between work conditions, satisfaction, and motivation. The study has the following limitations:

- This study did not measure performance of health workers, so it is not clear how the reported factors relate to their actual performance on the job or to job tenure. Such analyses can be important to managers and policy-makers, who may see job performance as the most important outcome.
- Researchers have also posited that health worker motivation is clearly linked to workers' intention to quit. Future studies can be conducted to assess whether this proves to be the case.

Tentative Chapterization

In accordance with the objectives of proposed study, findings with respect to various aspects the study comes under the following heads:

- Chapter 1 – Introduction
    - 1.1 Status of Health Human Resources in Rural Rajasthan
    - 1.2 Significance and need of the study
    - 1.3 Objectives of the study
    - 1.4 Hypothesis
    - 1.5 Limitations of the study
    - 1.6 Conceptual Framework
    - 1.7 Review of the related literature
    - 1.8 Research Methodology
        - 1.8.1 Research Design
        - 1.8.2 Sample and Data collection
        - 1.8.3 Statistical tools
- Chapter 2 – IPHS norms and current status
- Chapter 3 – HR Policies – A critical Review
- Chapter 4 – HR Policies and their effect on the level of motivation
- Chapter 5 – Factors determining the level of motivation of Health workers
- Chapter 6 – Level of Motivation of Doctors at CHC's and PHC's – A comparison
- Chapter 7 – The way ahead
    - 7.1 Findings
    - 7.2 Conclusion
    - 7.3 Suggestions
    - 7.4 Application of the research and the scope for further study
- References
- Bibliography
- Webliography
- Annexure

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